generation systems **10** described herein. The type of sensor **13** that is included in the secondary power generation system **10** may depend in part on cost and/or the application where the secondary power generation system **10** will be used. In some systems, one or more of the sensors **13**A, **13**B, **13**C, **13**D may be one type of sensor (such as a smoke detector) while others may be another type of sensor (such as a temperature sensor or a frequency detector). Other variations are possible.

[0019] The sensors **13**A, **13**B, **13**C, **13**D may communicate and exchange data with the controller **12** wirelessly or through a wired connection. For example, the sensors **13**A, **13**B, **13**C, **13**D may exchange data with the controller **12** relating to the presence of fire in an environment where the sensors **13**A, **13**B, **13**C, **13**D are located. As an example, a sensor **13**D may send a signal to the controller **12** when the sensor **13**D detects the presence of fire **15**. In another example, the sensor **13**D may send continuous signals to the controller **12** up to and/or until the sensor **13**D detects the presence of a fire **15**, after which the sensor **13**D may stop sending the continuous signal. Other variations are possible.

[0020] The controller **12** may control the operation of the generator **11** based on or in response to communications with the sensors **13**A, **13**B, **13**C, and **13**D. For example, the controller **12** may prevent the generator **11** from supplying power when the controller **12** determines that one or more of the sensors **13**A, **13**B, **13**C, **13**D detect the presence of fire **15**. The controller **12** may prevent the generator **11** from the supplying power to the building X in various ways that are known now, or discovered in the future.

[0021] In some forms, the controller **12** may prevent the generator **11** from starting when the one or more of the sensors **13**A, **13**B, **13**C, **13**D detect fire **15** within the building X. In other forms, the controller **12** may stop the generator **11** from running when one or more of the sensors **13**A, **13**B, **13**C, **13**D detect fire **15** within the building X. In some examples, the generator **11** may continue to operate even though the controller **12** is preventing the generator **11** from supplying power to the building X. In other examples, the controller **12** may ensure that the generator **11** does not run at all.

[0022] The sensors **13**A, **13**B, **13**C, **13**D may be positioned in various locations in or around the building X. For example, the sensors **13**A, **13**B, **13**C, **13**D may be located in different areas (such as different rooms or apartments) **14**A, **14**B, **14**C, **14**D within the building X. In other examples, some of the sensors **13**A, **13**B, **13**C, **13**D may be located outdoors, or in the same room.

[0023] In some systems, one or more sensors **13**A, **13**B, **13**C, **13**D may be temperature sensors located near a stove or a furnace, one or more sensors **13**A, **13**B, **13**C, **13**D may be a smoke detector located in a room of the building X, and/or one or more sensors **13**A, **13**B, **13**C, **13**D may be a frequency detector located at or near the electrical meter outside of the home or near where utility power enters the building X. The arrangement of the sensors within or around the building X may depend on the overall configuration of the building X as well as what is located inside the building X. Other variations and sensor positions are possible.

[0024] In some systems where the sensors **13**A, **13**B, **13**C, **13**D are positioned in different segmented locations (such as in different building Xs), the controller **12** may prevent the generator **11** from supplying power to the segmented locations where the particular one of the sensors **13**A, **13**B, **13**C, **13**D has detected fire, and continue to supply power to the other segmented locations.

[0025] FIG. **5** shows an example form of the power management system **10** where the controller **12** opens a switch **18** that prevents the generator **11** from supplying power to the building X. In other various forms, the controller **12**, or some of other type of electronic component, may command some other type of electronic component that is known now, or discovered in the future, to prevent the generator **11** from supplying power to the building X. Other examples are possible.

[0026] One example scenario relating to operation of a conventional power generation system is when rescue personnel arrive at the building X when there is fire detected in the building X. Upon arrival, rescue personnel may be trained to cut utility power to the building X (such as by pulling the electrical meter) prior to entering, to avoid inadvertent and undesirable contact with live electricity.

[0027] In some power generation systems **10**, one of the sensors **13**A, **13**B, **13**C, **13**D may detect the presence of the fire **15**, as described. Therefore, while a controller in a conventional power generation system might detect the loss of utility power and commands the generator to begin supplying power to the building X creating an unsafe environment for the rescue personnel, the controller **12** in the secondary power generation system **10** may prohibit the generator **11** from providing power to the building X.

[0028] In some forms, the controller **12** is configured to receive an override command that allows the generator **11** to supply power to the building X even when one or more of the sensors **13**A, **13**B, **13**C, **13**D are detecting fire **15** within the building X. There may be situations where it is desirable to supply power from the generator **11** to the building X even when fire **15** is present within the building X.

[0029] FIG. **2** is a schematic view illustrating the example secondary power generation system **10** shown in FIG. **1** where the controller **12** is a generator controller **12** that selectively operates and protects the generator **11**. In some forms, the controller **12** may be included in one or more other components that form the power management system **10**, such as for example a transfer switch.

[0030] FIG. **3** is a schematic view illustrating another secondary power generation system **10** that may prevent a generator **11** from supplying power to a power-consuming entity such as a building X. The secondary power generation system **10** may include an electrical generator **11** and a controller **12** that operates the generator **11**. The electrical generator **11** may include an alternator and an internal combustion engine configured to drive the alternator to generate power.

[0031] The controller **12** may communicate with and/or receive data from a switch **17**. As an example, the switch **17** may be an electric meter, or a switch connected with an electric meter. In another example, the switch **17** may be a switch which is triggered to move from open to closed (or vice versa) when utility power has been supplied to or cut from a building X.

[0032] The switch **17** may be closed when the electric meter is in an active or normal operating position such that utility power is being received by the building X. The switch **17** may be opened when the electric meter is pulled, or is in an inoperative position such that no utility power is being received by the building X. In other systems, the switch may